

REMARKS/ARGUMENTS

STATUS OF CLAIMS

Prior to entry of the present Amendment, claims 1 and 8-15 were pending in the present application. By this Amendment, claims 1, 8-10, 13, and 15 are amended, leaving claims 11, 12, and 14 unchanged. Claims 2-7 were withdrawn previously in response to a Restriction Requirement.

OBJECTIONS TO THE SPECIFICATION

On page 2 of the Office Action, the title of the present application is objected to as not being descriptive, and a new title is suggested. In light of the title suggestion by the Examiner, the Applicant hereby changes the title of the present application to “METHOD FOR FORMING A HEAT DISSIPATION DEVICE.” Withdrawal of the objection to the title is respectfully requested.

CLAIM REJECTIONS – 35 U.S.C. §112

On page 2 of the Office Action, claims 1 and 8-15 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. As indicated above, claim 1 is hereby amended to claim a method for forming a heat transfer device comprising a heat pipe, while removing reference to the term “thermally conductive envelope”. The Applicant respectfully submits that these amendments clarify the subject matter of claims 1 and 8-15 sufficiently to address the 35 U.S.C. §112 rejections. In this regard, the Applicant respectfully submits that references to the term “heat pipe” and “driving a heat pipe” in claim 1 encompass any structure or assembly known in the art as a heat pipe, which in some embodiments can simply be a pipe with working fluid therein. The intention of the Applicant is therefore not to limit claim 1 by a particular heat pipe shape, size, or construction, it being understood that a variety of different heat pipes can be utilized in connection with the present invention, as is described in detail in the present application as originally filed. Accordingly, and in light of the amendments made to claims 1, 8-10, 13, and 15, the Applicant respectfully requests withdrawal of the 35 U.S.C. §112 rejection of claims 1 and 8-15.

CLAIM REJECTIONS – 35 U.S.C. §102

On pages 3 and 4 of the Office Action, claims 1 and 8-15 are rejected under 35 U.S.C. §102(b) as being anticipated by Kalloch, Jr. (U.S. Patent No. 1,787,942).

Claim 1 is hereby amended and calls for:

A method for forming a heat transfer device for dissipating heat comprising the steps of:

arranging a plurality of fins that are formed with openings that substantially align with one another so as to define a die;

driving a heat pipe into said die so as to deform the heat pipe thereby forming at least one flattened surface and wherein an outside shape of the heat pipe is complementary with said openings; and

supporting said fins upon the heat pipe such that the heat pipe substantially defines a mounting base for said heat transfer device, and is attachable to a heat source for thermal energy exchange with said heat source.

(Amendment marks not shown)

Kalloch, Jr. discloses a method of forming a heat exchange apparatus having fins within which openings or perforations 3 are punched, wherein the material surrounding each opening is drawn to form a flange 4, and wherein a tube 1 is passed longitudinally therethrough. (page 2, lines 3-10 and 60-64 of Kalloch, Jr.) However, neither the specification nor the drawings of the reference disclose such a method including forming a flattened surface or defining a mounting base for attachment to a heat source. The disclosure of Kalloch, Jr. noted in the Office Action fail to teach or suggest anything that can fairly be considered a “flattened surface”, particularly because the surfaces noted are those of a round tube. The Applicant respectfully submits that no part of the tube 1 disclosed by Kalloch, Jr. has a “flattened surface” as claimed in amended claim 1, nor a surface that can fairly be compared to a “flattened surface”. In this regard, the term “flattened” has a well-understood meaning that is precisely the opposite of the tube shape illustrated by Kalloch, Jr. (the shape of a round or oval tube).

Kalloch, Jr. fails to teach, describe, or suggest, among other things, a method for forming a heat transfer device comprising “driving a heat pipe into [a] die...thereby forming at least one flattened surface” as claimed in amended claim 1, nor why such a change to the tube disclosed

U.S. Patent Application No. 10/817,170
Response and Amendment dated February 14, 2008
Reply to Office Action dated August 14, 2007
Attorney Docket No. 022232-9041-01

by Kalloch, Jr. would be necessary or desirable. Accordingly, withdrawal of the 35 U.S.C. §102(b) rejection of claim 1 in view of Kalloch, Jr. is therefore respectfully requested.

Claims 8-15 each depend from amended claim 1, and are therefore allowable based upon amended claim 1 and upon other features claimed in claims 8-15 but not discussed herein. Withdrawal of the 35 U.S.C. §102(b) rejection of claims 8-15 in view of Kalloch, Jr. is therefore respectfully requested.

CONCLUSION

In view of the foregoing, entry of the present Amendment and reconsideration of pending claims 1 and 8-15 are respectfully requested. The undersigned is available for telephone consultation at the Examiner's convenience.

Respectfully submitted,



Christopher B. Austin
Reg. No. 41,592

Michael Best & Friedrich LLP
100 East Wisconsin Avenue
Milwaukee, Wisconsin 53202-4108
(414) 271-6560